

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended)

A semiconductor device comprising:

a semiconductor substrate on which a photoelectric converting portion is formed;

~~a package which comprises at least~~ a light-shading means for shading an incoming light reflected from a rear surface of the semiconductor substrate to said photoelectric converting portion, wherein

said light-shading means is formed at an area corresponding to at least the photoelectric converting portion, said area being on the side of the rear surface of the semiconductor substrate.

Claim 2. (Original)

A semiconductor device according to claim 1, wherein said package comprises a wiring board with a connecting terminal formed on the rear surface.

Claim 3. (Original)

A semiconductor device according to claim 1 or 2, wherein said light shading means is rough surface area.

Claim 4. (Original)

A semiconductor device according to claim 1 or 2, wherein said light shading means is a multi-layer film composed of films with different refraction indices formed on the area corresponding to the photoelectric converting portion on the rear surface of said semiconductor substrate.

Claim 5. (Original)

A semiconductor device according to claim 1 or 2, wherein said light shading means is a light-shading film formed on the rear surface of said semiconductor substrate.

Claim 6. (Original)

A semiconductor device according to claim 1 or 2, wherein said wiring board is connected to said semiconductor substrate through a light-shading resin material.

Claim 7. (Original)

A semiconductor device according to claim 1 or 2, wherein a surface of said wiring board is rough surface.

Claim 8. (Currently Amended)

A semiconductor device according to claims 1 or 2, wherein said wiring board includes a light shading layer in the interior or on the rear surface of the semiconductor substrate.

Claim 9. (Currently Amended)

A method for manufacturing a semiconductor device comprising the steps of:

a forming step for forming a plurality of semiconductor devices on the front surface of a semiconductor substrate;

a bonding step for bonding a wiring board on the rear surface of said semiconductor substrate;

a separating step for separating a bonding structure₁ obtained by bonding₁ into semiconductor devices₂; and

a grinding step for forming rough surface on the rear surface of the semiconductor substrate.

Claim 10. (Currently Amended)

A method for manufacturing a semiconductor device comprising the steps of:

a forming step for forming a plurality of semiconductor devices on the front surface of a semiconductor substrate;

a bonding step for bonding a wiring board on the rear surface of said semiconductor substrate ~~through~~ using light-shading adhesive the light-shading adhesive suppressing light reflected from the rear surface of the semiconductor substrate from reaching the semiconductor device; and

a separating step for separating a bonding structure obtained by bonding, into said semiconductor devices.